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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,855	02/23/2004	Young-sup Kim	Q78951	5482

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EXAMINER	
PHAN, TUANKHANH D	

ART UNIT	PAPER NUMBER
2163	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/782,855	KIM, YOUNG-SUP	
	Examiner	Art Unit	
	TUAN-KHANH PHAN	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The Request for continued Examination, filed 6/23/2008, has been acknowledged by the Examiner. Claims 1-9 are pending.

Response to Arguments

Applicant's arguments filed 6/23/2008 have been fully considered but they are not persuasive.

Applicant argues that the reference does not appear to disclose anything about determining whether or not a sliding window is full of IP packets and updating sequence numbers by adding a size of the sliding window to each of the sequence numbers if the sliding window is full of IP packets.

Response: Paragraph [0033] (lines 1-4) clearly shows that updating sequence number (i.e. sequence number of next packet is 9) by adding a size of the sliding window (i.e. sliding window would extend from 9 to 19 since the size is 10, so that once packets of 9 is full, sequence of 10-19 will be allocated for subsequent packets). It is also shown that sequence number (Figure 2, lines 5-6) is being updated (Figure 2, lines 19-20) by adding the sequence number [counter that keeping track of sequence number] with window size. In addition, sequence numbers are inserted into data field for however length (¶ [0025], lines 1-3) where the set of acceptable sequence numbers is updated included the sliding window size accordingly (¶ [0027] 8-9). In addition, a packet inherently comes with the IP and/or header to indicate the destination of the

packet is being delivered too, hence a packet no difference than an IP packet. Thus, applicant's argument is not persuasive.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagarajan et al. (US Pub. 2004/0062248), hereinafter Nagarajan.

Regarding claim 1, Nagarajan teaches a method of managing a sliding window (i.e. **maintaining a sliding window**, para 0009, lines 1-9), comprising: (a) receiving and IP packet (para [0006], lines 1-3; data packets being received wherein IP packet is inherent); (b) determining whether or not a sliding window, used for determining whether or not the received IP packet is to be transmitted or abandoned (i.e. **accepted or rejected**, para 0010, lines 7-20), is full of IP packets; and (c) updating sequence

numbers stored in the sliding window by adding a size of the sliding window or predetermined amount to each of the sequence numbers if the sliding window is full of IP packets (i.e. **updated by adding sequence number to the size of sliding window**, para 0033, lines 1-3; para 0027, lines 8-9).

Regarding claim 2, Nagarajan teaches a method of managing a sliding window, comprising: (a) setting the size and sequence number information of a sliding window (i.e. **setting the window size**; Figure 2, lines 7; para 0028, lines 1-10); (b) receiving an IP packet and reading a sequence number included in the received IP packet (i.e. **receiving a packet and comparing the sequence number**, para 0010, lines 10-15); (c) determining whether or not the sequence number of the received IP packet is within a range of sequence numbers of the sliding window set in (a) (i.e. **whether the current packet falls within the sliding window**, para 0009, lines 1-9); (d) if the sequence number of the received IP packet is within the range of the sequence numbers of the sliding window, transmitting the received IP packet to a specified network layer and otherwise, abandoning the received IP packet (i.e. **determining whether to accept or reject the packet**, para 0010, lines 7-20); (e) determining whether or not the sliding window is full of IP packets (para 0028, lines 1-10); and (f) updating the sliding window if the sliding window is full of IP packets (i.e. **updated by adding sequence number to the size of sliding window**, para 0033, lines 1-3; para 0027, lines 8-9).

Regarding claim 3, Nagarajan teaches the method of claim 2, wherein in (a), leftmost and rightmost values of the sliding window are set to 0 and 1 (para 0025, lines

10-17), respectively, and the size of the sliding window is set to n (para 0025, lines 1-10).

Regarding claim 4, Nagarajan teaches the method of claim 3, wherein if the sliding window is full of IP packets in (f), the sliding window is updated by adding a size of the sliding window set in (a) to each of the sequence numbers stored in the sliding window (para 0033, lines 1-4).

Regarding claim 5, Nagarajan teaches the method of claim 2, wherein in (a), leftmost and rightmost values of the sliding window are set to 0 and 1(para 0025, lines 10-17), respectively, the size of the sliding window is set to n (para 0025, lines 1-10), and the extent to which each of the sequence numbers stored in the sliding window is to be increased is set to m (para 0025, lines 1-10; para 0028, lines 1-10).

Regarding claim 6, Nagarajan teaches the method of claim 5, wherein if the sliding window is full of IP packets in (f), the sliding window is updated by adding m to each of the sequence numbers stored in the sliding window (para 0025, lines 1-10; para 0028, lines 1-10).

Regarding claim 7, Nagarajan teaches an apparatus for managing a sliding window, comprising: a sequence number information reading unit operable to receive an IP packet and read a sequence number included in the received IP packet (abstract; (para 0009, lines 1-9); memory operable to store sequence number information of a sliding window (para 0112, lines 1-9); and a comparison unit operable to compare the sequence number read by the sequence number information reading unit with the sequence number information of the sliding window (para 0010, lines 7-20), transmit the

received IP packet to a specified network layer if the sequence number read by the sequence number information reading unit is within a range of sequence numbers stored in the sliding window, abandon the received IP packet otherwise, determine whether or not the sliding window is full of IP packets, and update the sliding window if the sliding window is full of IP packets (para 0010, lines 7-20).

Regarding claim 8, Nagarajan teaches the apparatus of claim 7, wherein the comparison unit is operable to update the sliding window by adding a size of the sliding window or a predetermined value to each of the sequence numbers stored in the sliding window (para 0010, lines 7-20).

Regarding claim 9, Nagarajan teaches a computer-readable recording medium on which a program enabling a method of managing a sliding window is recorded (para 0028, lines 1-10; para 0112, lines 1-9), the method of managing a sliding window comprising: (a) receiving an IP packet (para [0006], lines 1-3; data packets being received wherein IP packet is inherent); (b) determining whether or not a sliding window, used for determining whether or not a received IP packet is to be transmitted or abandoned, is full of IP packets (para 0010, lines 7-20); and (c) updating sequence numbers stored in the sliding window by adding a size of the sliding window to each of the sequence numbers if the sliding window is full of IP packets (para 0033, lines 1-3; para 0027, lines 8-9).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN-KHANH PHAN whose telephone number is (571)270-3047. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TKP
/Hung T Vy/
Primary Examiner, Art Unit 2163